

(c) a sequence hybridizing under stringent conditions to the sequences of (a) and/or (b),

(d) a genomic sequence containing the sequence of (a), (b) or (c) and further containing one or more introns, or

(e) a sequence which differs from (a), (b), (c) or (d) due to its origin from a different species.

19. (New) A DNA sequence according to claim 18,
wherein said DNA sequence encodes a protein that is capable of inducing oocyte maturation and/or modulating cell division.

20. (New) A DNA sequence according to claim 18,
wherein said DNA sequence further contains expression control sequences operably linked to the coding DNA sequence.

21. (New) An expression vector,
wherein said expression vector contains a DNA sequence according to claim 18.

22. (New) A protein
wherein said protein is encoded by a DNA sequence according to claim 18.

23. (New) A protein according to claim 22,
wherein said protein contains an amino acid as shown in SEQ ID NO. 3 or 4.

24. (New) A protein according to claim 22,
wherein said protein shows an oocyte maturation inducing activity and/or a cell division modulating activity.

25. (New) A protein according to claim 22,

wherein said protein contains deletions, substitutions and/or additions of amino acids that do not substantially affect its activity.

26. (New) A protein according to claim 22,

wherein a second protein is fused to build a fusion protein.

27. (New) A method for inducing oocyte maturation comprising administering an oocyte maturation effective amount of a protein according to claim 22.

28. (New) A pharmaceutical composition containing as active agent a protein according to claim 22.

29. (New) A pharmaceutical composition according to claim 28, containing the protein in combination with a pharmaceutically acceptable carrier or adjuvant.

30. (New) A method for modulating cell proliferation comprising administering a cell proliferation modulating-effective amount of a pharmaceutical composition according to claim 27.

31. (New) A diagnostic marker for cell proliferation and/or cell differentiation comprising a protein according to claim 22.

32. (New) A target for the identification of drugs that modulate cell progression and/or cell proliferation and/or cell differentiation, wherein said target is a protein according to claim 22.

33. (New) A method for developing pharmaceuticals for the treatment of cancer or other pathological situations with uncontrolled cell proliferation, wherein said method comprises the use of the target of claim 22 for the identification of pharmaceuticals suitable for the treatment of cancer or other pathological situations with uncontrolled cell proliferation.

34. (New) A diagnostic marker for cell proliferation and/or cell differentiation for hybridization experiments to determine the amount of homologous nucleic acid sequences, wherein said diagnostic marker comprises a DNA sequence according to claim 18 or a part thereof.

35. (New) A method for modulating cell division and/or differentiation and/or proliferation comprising administering an amount of a protein according to claim 22 that is effective for modulating cell division and/or differentiation and/or proliferation.

36. (New) A method for modulating cell differentiation comprising administering an cell differentiation modulating-effective amount of a pharmaceutical composition according to claim 27.

37. (New) A fertility treatment comprising administering an fertility increasing effective amount of a pharmaceutical composition according to claim 27.--

REMARKS

Claims 1-17 are pending in this application. By this Amendment, Claims 1-17 have been cancelled and replaced with new Claims 18-37. No new matter is contained in the amendments.

In this Amendment, Claims 1-17 have been replaced with new Claims 18-34. Due to a typographical error, the Preliminary Amendment dated August 2, 2001 incorrectly numbered the claims being amended (for instance Claim 4 was labeled as Claim 3). Therefore, for ease of reference, previously pending Claims 1-17 have been cancelled in their entirety. Claims 18-34 are duplicates of original Claims 1-17 with the exception that the multiple dependencies of the original claims have been removed. Additionally, the "characterized in that" language of the original claims has been